



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,577	09/24/2003	Che-Hsiung Hsu	UC0223 US NA	6804
23906 7590 07/18/2007 E I DU PONT DE NEMOURS AND COMPANY LEGAL PATENT RECORDS CENTER BARLEY MILL PLAZA 25/1128 4417 LANCASTER PIKE WILMINGTON, DE 19805			EXAMINER THOMPSON, CAMIE S	
			ART UNIT 1774	PAPER NUMBER
			MAIL DATE 07/18/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/669,577	<b>Applicant(s)</b> HSU ET AL.	
	<b>Examiner</b> Camie S. Thompson	<b>Art Unit</b> 1774	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on Amendment filed April 26, 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) 23-43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 and 44-53 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. Applicant's amendment and accompanying remarks filed April 26, 2007 are acknowledged.
2. The rejection of claims 1-18, 23, 44-46 and 51-53 under 35 U.S.C. 102(e) as being anticipated by McCormick et al., U.S. Patent Number 6,611,096 is withdrawn due to applicant's argument.
3. The rejection of claims 1-9 under 35 U.S.C. 102(e) as being anticipated by Gardner et al., U.S. Patent Number 5,716,550 is withdrawn due to applicant's arguments.
4. The rejection of claims 1-22 and 44-53 under 35 U.S.C. 101 as being the same invention as application 10/803,113 is withdrawn due to applicant's argument.

### *Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

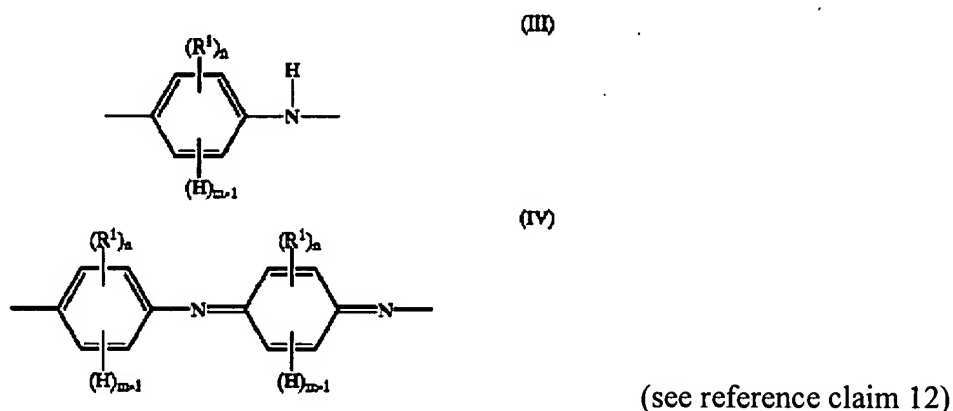
6. Claims 1-5, 10-14, 17-19, 46 and 51-53 are rejected under 35 U.S.C. 102(e) as being anticipated by Hsu, U.S. Patent Number 6,756,474.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C.

Art Unit: 1774

102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Hsu discloses an aqueous dispersion composition comprising a polyaniline comprising an aniline monomer selected from



and a sulfonic acid. Additionally, the reference discloses that the aqueous dispersion composition can be used in a layer in an organic electronic device.

### *Claim Rejections - 35 USC § 103*

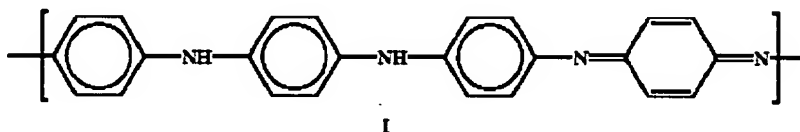
7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-18, 23, 44-46 and 51-53 rejected under 35 U.S.C. 103(a) as being unpatentable over McCormick et al., U.S. Patent Number 6,611,096.

McCormick discloses organic electronic having a conducting self-doped polymer buffer layer, particularly a self-doped polyaniline buffer layer (see column 2, line 65-column 3, line 10).

Column 5, line 50-column 6, line 68 describes the self-doped polyanilines with sulfonic acid groups wherein the polyaniline has a form of



It is disclosed in column 7, lines 14-21 that although sulfonic acid groups are used but other suitable groups can include perfluoroacids, carboxylic acid, phosphoric acid and phosphonic acid. McCormick does not specifically disclose a dispersion. However, McCormick does disclose a composition comprising a colloid forming polymeric acid. Therefore, it would have been obvious to one of ordinary skill in the art to recognize that the composition in the McCormick reference that has the same components as the present claims would be a dispersion in that the polymeric acid used is a colloidal forming polymeric acid.

### ***Double Patenting***

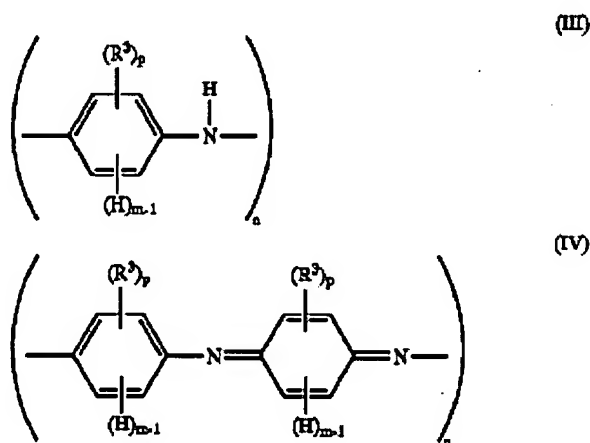
9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Art Unit: 1774

10. Claims 1-22 and 44-53 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5, 7-10, 14-15 and 17-18 of copending Application No. 10/814,917. Although the conflicting claims are not identical, they are not patentably distinct from each other because both recite a composition comprising an aqueous dispersion of at least one conductive polymer such as polyaniline and at least one colloid-forming polymeric acid wherein the polymer is polyaniline that comprises formulae



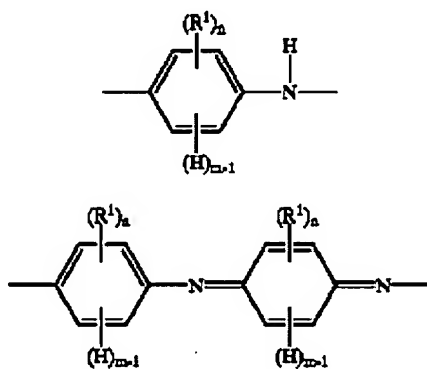
Additionally, both applications recite that the colloid forming polymeric acid can be a fluorinated polymeric sulfonic acid (see claims 7-9). Also, both applications recite that the composition is used in a buffer layer for an organic device.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

11. Claims 1-5 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 12 and 7 of U.S. Patent No. 6,756,474. Although the

Art Unit: 1774

conflicting claims are not identical, they are not patentably distinct from each other because both the present application and the patented reference recite an aqueous composition comprising a polyaniline comprising an aniline monomer selected from



and a sulfonic acid.

12. Claims 1-22 and 4-53 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 and 20-21 of copending Application No. 10/803,113. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications recite a composition comprising an aqueous dispersion of a polyaniline and at least one colloid-forming polymeric acid. The present application recites at least one colloid forming polymeric acid, which encompasses a fluorinated polymeric acid. Therefore, it would have been obvious to one of ordinary skill in the art to recognize that the colloid forming fluorinated polymeric acid of the copending application is a colloid forming polymeric acid.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.



***Response to Arguments***

13. Applicant's arguments with respect to the present claims have been considered but are moot in view of the new ground(s) of rejection. Applicant argues that the McCormick reference does not disclose a dispersion. McCormick comprises the same composition as the present claims, which include a polymeric acid that is colloidal forming. Additionally, applicant argues that the present claims are not of the same scope of co-pending application 10/803,113. The present application recites colloid forming polymeric acid, which encompasses a colloid forming fluorinated polymeric acid.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Camie S. Thompson whose telephone number is (571) 272-1530. The examiner can normally be reached on Monday through Friday from 7:30 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena L Dye, can be reached at (571) 272-3186. The fax phone number for the Group is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



MILTON I. CANO  
SUPERVISORY PATENT EXAMINER